



Taxonomic Paper

# Checklist of Fabaceae Lindley in Balaghat Ranges of Maharashtra, India

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## Abstract

The present paper provides an enumeration of leguminous taxa of Balaghat Ranges of Maharashtra along with their habits, phenological data and voucher specimen numbers. During the present work, a total of 123 species, 4 subspecies and 17 varieties of Fabaceae have been recorded for Balaghat Ranges of Maharashtra, of which 119 taxa are occurring in wild while 25 are under cultivation. The members of Fabaceae are dominant in herbaceous vegetation of the Balaghat Ranges. There are more species in genera like *Crotalaria* (23 taxa), *Indigofera* (16 taxa), *Alysicarpus* (14 taxa), *Vigna* (11 taxa) and *Desmodium* (8 taxa). Twelve taxa are endemic to India of which *Indigofera deccanensis* falls into Critically Endangered IUCN Red data category. The legumes of Balaghat Ranges have many actual and potential uses such as food, fodder and sources of edible oil, natural dyes, industrial lubricants, timber and medicines. About 19 leguminous taxa are wild relatives of food and fodder crops have resistance to pests and diseases, and abiotic stresses such as drought and salinity, can be used for crop improvement.

## Keywords

Legumes, enumeration, Balaghat Ranges, India.



## Introduction

Fabaceae Lindl. *nom. alt.* (Papilionaceae Giseke *nom. cons.*) is the third largest family of flowering plants after Orchidaceae and Asteraceae, with approximately 483 genera and about 12,000 species mainly distributed in tropical and subtropical region of the World (Lewis et al. 2005). The family is an important in a diversity of ecosystems; members of it present and often dominant in nearly every vegetation type on earth, from tropical rain forests to deserts and alpine tundra (Wojciechowski 2003). In India, there are about 147 genera, 805 species, 33 subspecies, 155 varieties and 14 forma of legumes (Sanjappa 1991, Sanjappa 1995; Dave 2004; Chaudhary and Khan 2005; Ansari 2008; Jabbar et al. 2010; Aitawade et al. 2012; Chavan et al. 2013; Gaikwad et al. 2014d). The higher concentration of legumes are in peninsular India (about 619 species) and northeast India including eastern Himalaya (about 767 species) corresponding to two hotspot areas in India. About 83 genera, 326 species, 2 subspecies, 57 varieties and 1 forma of Fabaceae occur in Maharashtra (Almeida 1998; Kothari 2000; Naik 1998; Aitawade et al. 2012; Gaikwad et al. 2012; Chavan et al. 2013; Gaikwad et al. 2014a, Gaikwad et al. 2014c, Gaikwad et al. 2014d).

A hilly terrain and semi-arid general climate of Balaghat Ranges supports unique tropical dry deciduous forests and thorny scrub vegetation with vast grasslands. The grasslands of Balaghat Ranges are unique and popularly known as Indian Savannas. The herbaceous vegetation of Balaghat Ranges is notable as it amounts to 59% of the whole flora. The members of the Fabaceae are dominant in herbaceous vegetation. The genera like *Alysicarpus* Neck. ex Desv., *Crotalaria* L., *Indigofera* L., *Desmodium* Desv. and *Vigna* Savi are most diversified in the Balaghat region. In spite of rich diversity, the legumes of Balaghat Ranges remained neglected or ignored by earlier workers probably due to the general dry climate of the region. However, some sporadic efforts have been made to study the legumes of Balaghat in the last hundred years such as Jain (1961), Jagtap (1965), Naik (1966), Bhagvat (1968), Naik (1969), Naik (1970), Wadood Khan (1982), Mahabale (1987) and Naik (1998). Thus, comprehensive and reliable account of legumes of Balaghat Ranges does not exist. Hence, the present study was undertaken in 2009 as Ph.D. work to produce an up-to-date account of the legumes of Balaghat Ranges.

## Materials and methods

### Study area

Balaghat Ranges are eastern spur of Western Ghats of India lie in between 18°47'40.26" - 18°32'29.28"N latitude and 75°20'26.90" - 76°48'56.18"E longitude, spread in Ahmednagar, Beed, Latur, Osmanabad and Solapur districts of the Maharashtra State of India in the basins of river Manjra and its tributaries Bori, Lendi, Manyad, Terna and Tiru. Balaghat occupies an area of about 18,111.34 Km<sup>2</sup> (Fig. 1). The terrain of Balaghat shows hills and hillocks of varying heights (450 to 850 m), which support unique tropical dry deciduous forests, open scrub jungles and vast grasslands. The weather in general is dry and said to



be moderately extreme. An annual temperature ranges between 27.7°C - 42°C and the relative humidity is extremely low (35-50%) for major part of the year while it is highest (75%) during the monsoon season (June-October). The average annual rainfall is about 729 mm mainly from June to October.



Figure 1.

Location map of Balaghat Ranges of Maharashtra (India).

## Data collection

First of all a list of taxa of the family Fabaceae of the Balaghat Ranges was prepared by referring to all available literature and specimens deposited in various herbaria. After that, field-visits of 1-3 days duration were undertaken to nooks and corners of Balaghat Ranges for plant collection. During the field visits, information on habit, habitat, phenological data, GPS data and present status were gathered. Three specimens were collected of each species and prepared voucher specimens following standard herbarium techniques (Rao and Sharma 1990). The specimens are deposited in the herbarium of Walchand College, Solapur, Maharashtra (WACS). Identification of taxa was confirmed with the help of available literature such as Cooke (1958), Babu et al. (1987), Sanjappa (1995), Almeida (1998), Naik (1998), Kothari (2000), Lakshminarasimhan (2001), Tomooka et al. (2002a), Tomooka et al. (2002b), Dave (2004), Chaudhary and Khan (2005), Ansari (2008), Jabbar et al. (2010), Toomoka et al. (2011) and Aitawade et al. (2012). Doubtful and interesting identifications were confirmed by their direct comparison with authentically identified specimens deposited in various herbaria such as Herbarium of Botanical survey of India, Pune (BSI); Blatter Herbarium, St. Xavier's College, Mumbai (BLAT) and BAMU Herbarium, Aurangabad (BAMUA). The botanical name of the taxa have been verified with International Plant Name Index (IPNI). The genera, species and infraspecific taxa are alphabetically arranged in the present paper. Some important plants are featured in photographs (Figs 2, 3, 4, 5).



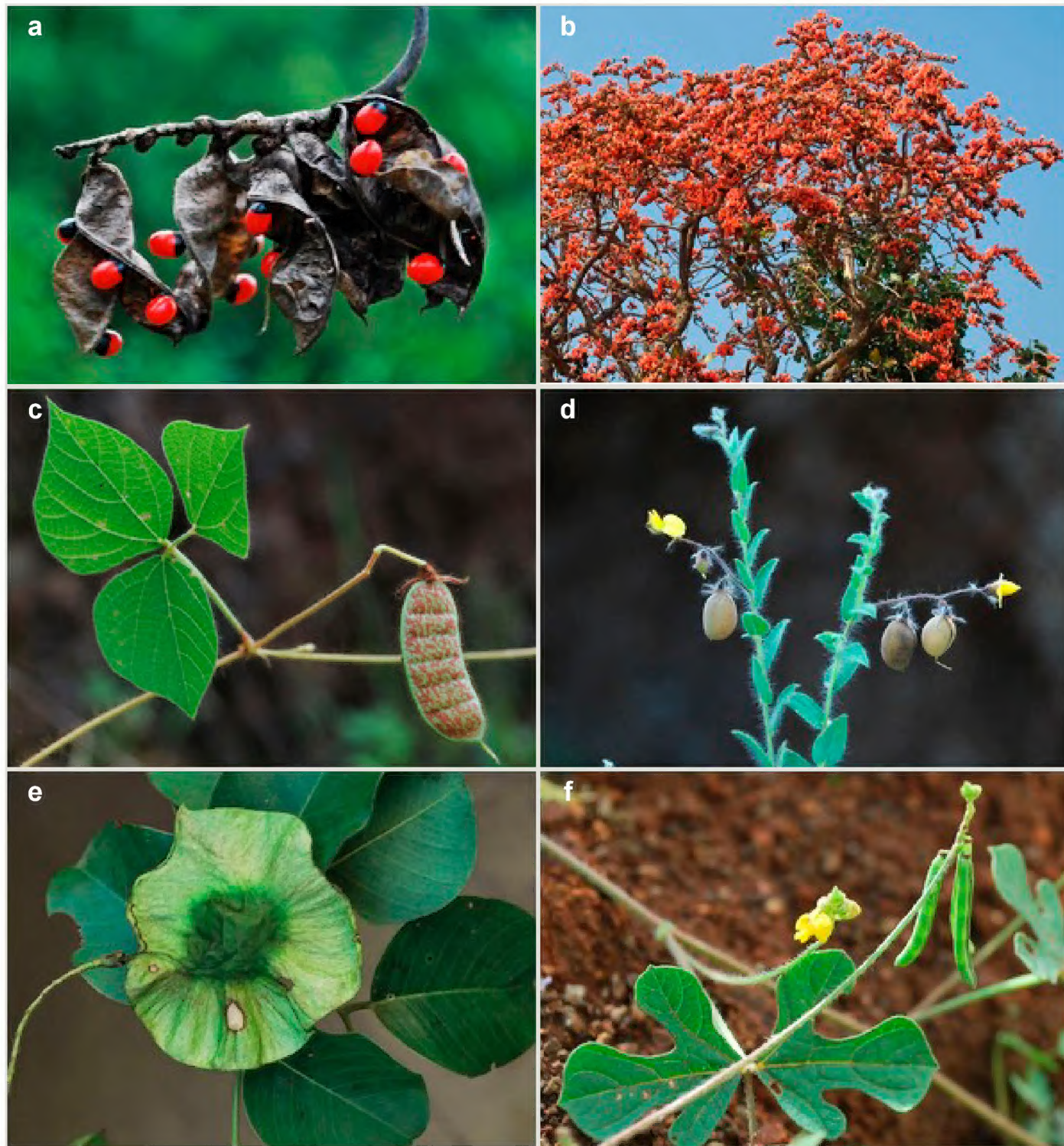


Figure 2.

Habitus of some important plants in situ.

- a:** *Abrus precatorius* L.
- b:** *Butea monosperma* (Lam.) Taub. var. *monosperma*
- c:** *Cajanus platycarpus* (Benth.) van der Maesen
- d:** *Crotalaria filipes* Benth.
- e:** *Pterocarpus marsupium* Roxb.
- f:** *Vigna indica* Dixit et al.





Figure 3.

Habitus of some important plants in situ.

**a:** *Aeschynomene americana* L.

**b:** *Alysicarpus longifolius* Wight & Arn.

**c:** *Alysicarpus pubescens* Law var. *vasavadae* (Hemadri) Sanjappa

**d:** *Crotalaria leptostachya* Benth.

**e:** *Crotalaria notonii* Wight & Arn.

**f:** *Crotalaria orixensis* Willd.



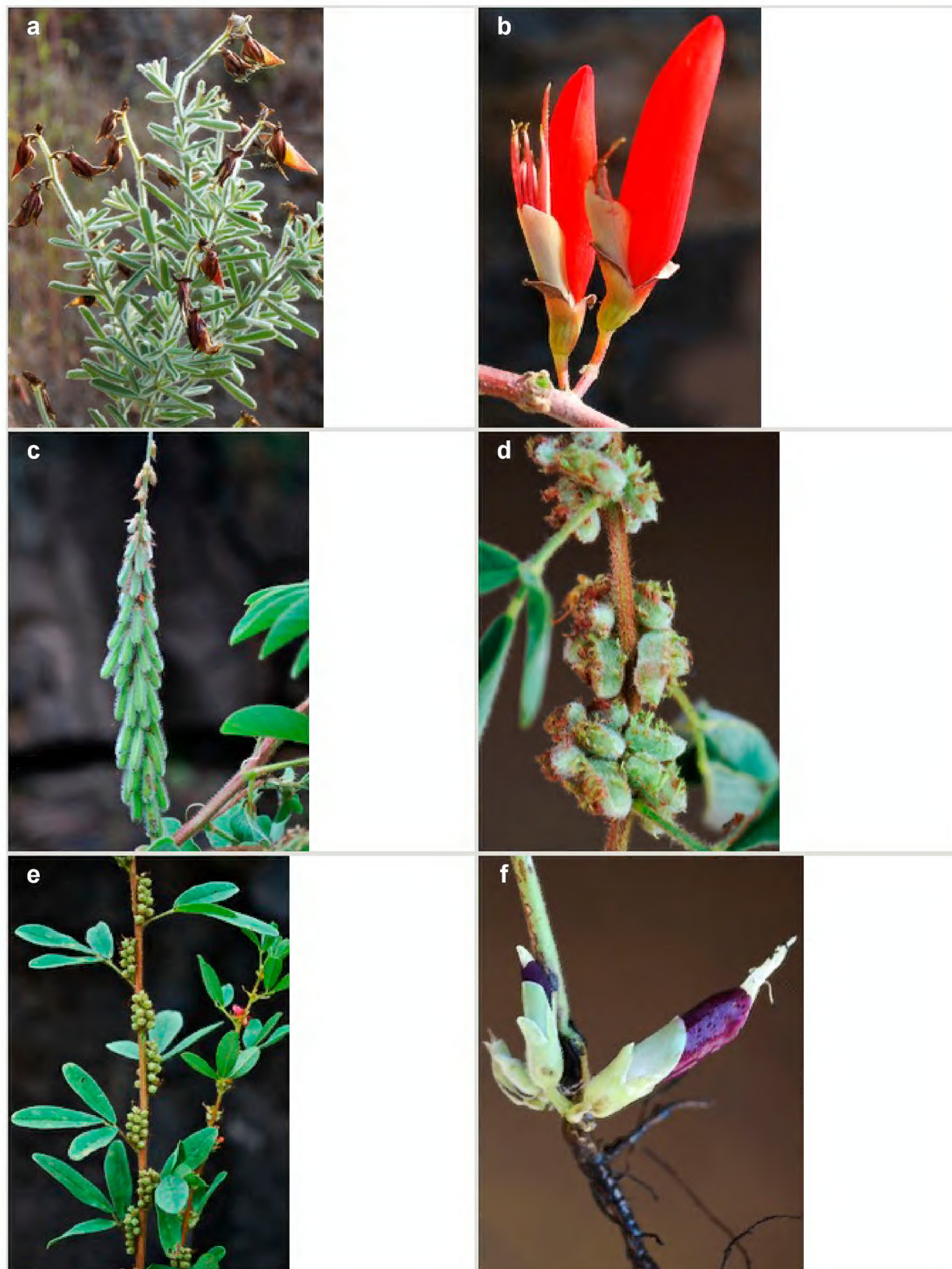


Figure 4.

Habitus of some important plants in situ.

**a:** *Crotalaria ramosissima* Roxb.

**b:** *Erythrina suberosa* Roxb.

**c:** *Indigofera astragalina* DC.

**d:** *Indigofera glandulosa* Wendl. var. *glandulosa*

**e:** *Indigofera glandulosa* Wendl. var. *sykesii* Griff. ex Baker

**f:** *Mucuna minima* Haines



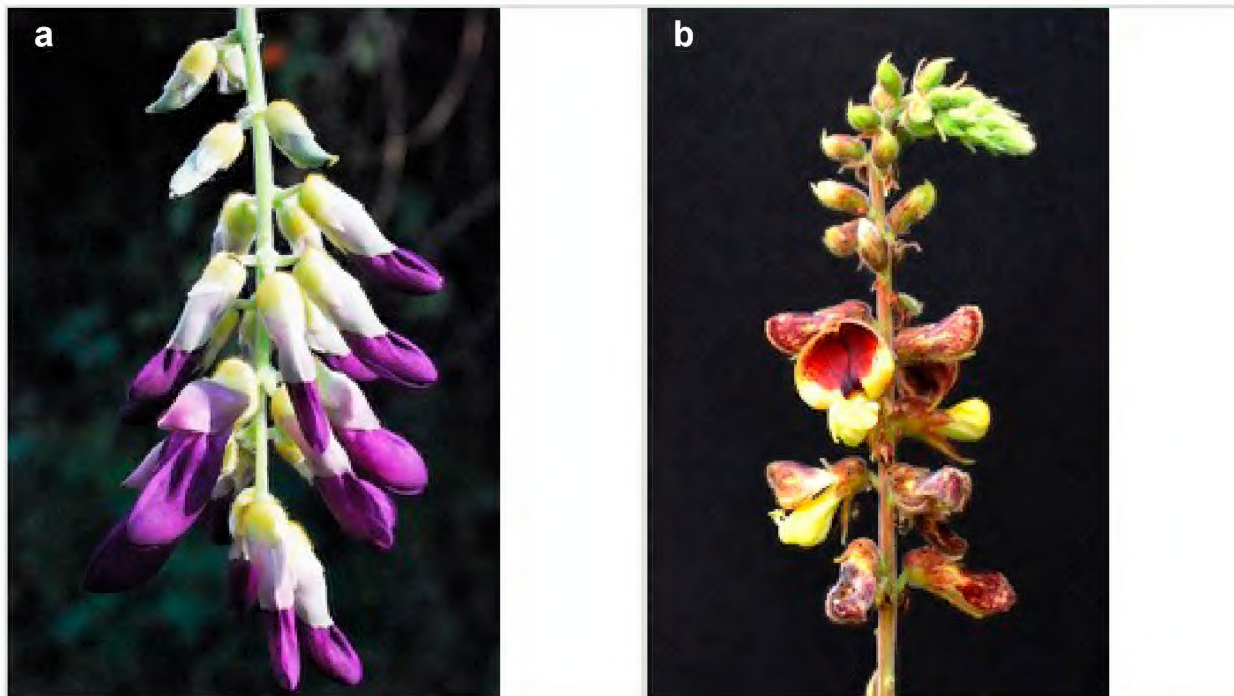


Figure 5.

Habitus of some important plants in situ.

**a:** *Mucuna pruriens* (L.) DC.

**b:** *Rhynchosia rothii* Benth. ex Ait.

## Checklist of leguminous taxa of Balaghat Ranges of Maharashtra

### *Abrus precatorius* L. 1767

#### Materials

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Ramling; verbatimLatitude: 18°17.322N; verbatimLongitude: 75°56.637E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-March; fieldNumber: RDG- 003; fieldNotes: Woody climbers; institutionCode: Walchand College of Arts & Science, Solapur (WCAS).
- b. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Apsinga; verbatimLatitude: 18°03.982N; verbatimLongitude: 76°03.951E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-March; fieldNumber: R.D. Gore- 13107; fieldNotes: Woody climbers; institutionCode: Walchand College of Arts & Science, Solapur (WCAS).

### *Aeschynomene americana* L. 1753

#### Material

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Beed; locality: Neknur; verbatimLatitude: 18°48.504N; verbatimLongitude: 75°46.358E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: October-December; fieldNumber: RDG- 471; fieldNotes: Erect herbs; institutionCode: Walchand College of Arts & Science, Solapur (WCAS).

***Aeschynomene indica* L. 1753****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Ambajogai; locality: Near Talni; verbatimLatitude: 18°44.311N; verbatimLongitude: 76°30.448E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-February; fieldNumber: RDG- 025; fieldNotes: Erect herbs; institutionCode: Walchand College of Arts & Science, Solapur (WCAS).

***Alhagi maurorum* Medik. 1787****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Beed; locality: Beed; verbatimCoordinates: -; geodeticDatum: unknown; month: March-April; fieldNumber: V.N. Pardeshi- 1209; fieldNotes: Shrubs; institutionCode: Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (BAMU).

***Alysicarpus bupleurifolius* var. *bupleurifolius* (L.) DC. 1825****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Ghatangri; verbatimLatitude: 18°13.520N; verbatimLongitude: 76°00.090E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: July-September; fieldNumber: RDG- 005; fieldNotes: Erect herbs; institutionID: Wachland College of Arts & Science, Solapur (WCAS).

***Alysicarpus hamosus* Edgew. 1853****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Lohara; locality: Manjra-dam; verbatimLatitude: 18°33.304N; verbatimLongitude: 76°05.868E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-November; fieldNumber: RDG- 297; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Alysicarpus heyneanus* Wight & Arn. 1834****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Patoda; locality: Lambarwadi; verbatimLatitude: 18°50.122N; verbatimLongitude: 75°19.118E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: October-February; fieldNumber: RDG- 440; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).



***Alysicarpus longifolius* Wight & Arn. 1834****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Jalkot; verbatimLatitude: 17°49.827N; verbatimLongitude: 76°19.664E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-January; fieldNumber: RDG- 353; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Alysicarpus luteo-vexillatus* Naik & Pokle, 1986****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Bhanasgaon; verbatimLatitude: 18°16.839N; verbatimLongitude: 75°56.587E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-January; fieldNumber: RDG- 008; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Alysicarpus monilifer* (L.) DC. 1825****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Ramling; verbatimLatitude: 18°17.741N; verbatimLongitude: 75°56.712E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-November; fieldNumber: RDG- 006; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Alysicarpus ovalifolius* (Schum.) Leonard, 1954****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Patoda; locality: Khandala; verbatimLatitude: 18°51.180N; verbatimLongitude: 75°42.552E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-November; fieldNumber: RDG- 1017; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Alysicarpus pubescens* var. *pubescens* Law, 1840****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Bhanasgaon; verbatimLatitude: 18°17.157N; verbatimLongitude: 75°56.559E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-January; fieldNumber: RDG- 009; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).



***Alysicarpus pubescens* var. *vasavadae* (Hemadri) Sanjappa, 1991****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Beed; locality: Dahiphal; verbatimLatitude: 18°49.504N; verbatimLongitude: 75°52.876E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-January; fieldNumber: RDG- 381; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Alysicarpus roxburghianus* Thoth. & Pramanik, 1981****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Ambajogai; locality: Near Ghatnandur; verbatimLatitude: 18°43.924N; verbatimLongitude: 76°31.804E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-December; fieldNumber: RDG- 014; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Alysicarpus rugosus* (Willd.) DC. 1825****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Tuljapur town; verbatimLatitude: 17°59.911N; verbatimLongitude: 76°04.268E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-October; fieldNumber: RDG- 885; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Alysicarpus scariosus* (Rottl. ex Spreng.) Grah. ex Thw. 1859****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Ramling; verbatimLatitude: 18°17.812N; verbatimLongitude: 75°56.915E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: July-January; fieldNumber: RDG- 001; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Alysicarpus tetragonolobus* Edgew. 1853****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Ghatangri; verbatimLatitude: 18°13.266N; verbatimLongitude: 75°59.915E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: June-December; fieldNumber: RDG- 004; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).



***Alysicarpus vaginalis* var. *nummularifolius* Miq. 1855****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Lohara; locality: Udatpur; verbatimLatitude: 17°59.188N; verbatimLongitude: 76°28.948E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-December; fieldNumber: RDG- 183; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Arachis hypogaea* L. 1753****Materials**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Omerga; locality: Wagdari; verbatimLatitude: 17°54.785N; verbatimLongitude: 76°39.982E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: October-February and May-June; fieldNumber: RDG- 577; fieldNotes: Erect or prostrate herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).
- b. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Bori (Apsinga); verbatimLatitude: 18°03.062N; verbatimLongitude: 76°05.356E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: October-February and May-June; fieldNumber: R.D. Gore- 13189; fieldNotes: Erect or prostrate herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Butea monosperma* var. *monosperma* (Lam.) Taub. 1894****Materials**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Latur; locality: Chakur; verbatimLatitude: 18°31.874N; verbatimLongitude: 76°54.516E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: March-June; fieldNumber: RDG- 046; fieldNotes: Trees; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).
- b. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Naldurg; verbatimLatitude: 17°47.741N; verbatimLongitude: 76°17.807E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: March-June; fieldNumber: R.D. Gore- 13062; fieldNotes: Trees; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Cajanus cajan* (L.) Mill. 1900****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Chiwri; verbatimLatitude: 17°52.201N; verbatimLongitude: 76°12.725E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-February; fieldNumber: R.D. Gore- 13163; fieldNotes: Shrubs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).



***Cajanus platycarpus* (Benth.) van der Maesen, 1986****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Ramling; verbatimLatitude: 18°17.408N; verbatimLongitude: 75°57.347E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-December; fieldNumber: RDG- 745; fieldNotes: Trailing/twining herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Cajanus scarabaeoides* (L.) Thouars, 1817****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Ambajogai; locality: Near Talni; verbatimLatitude: 18°44.377N; verbatimLongitude: 76°31.028E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-December; fieldNumber: RDG- 021; fieldNotes: Trailing/twining herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Canavalia cathartica* Thouars, 1991****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Patoda; locality: Near Khandala; verbatimLatitude: 18°50.423N; verbatimLongitude: 75°41.969E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-December; fieldNumber: RDG- 1018; fieldNotes: Woody climbers; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Canavalia gladiata* (Jacq.) DC. 1825****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Barshi; locality: Ukkadgaon; verbatimLatitude: 18°20.458N; verbatimLongitude: 75°53.747E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-December; fieldNumber: KUG- 430; fieldNotes: Woody climbers; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Cicer arietinum* L. 1753****Materials**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Ambajogai; locality: Near Talni; verbatimLatitude: 18°44.277N; verbatimLongitude: 76°30.874E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: November-January; fieldNumber: RDG- 022; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).



- b. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Apsinga; verbatimLatitude: 18°04.951N; verbatimLongitude: 76°01.676E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: November-January; fieldNumber: *R.D. Gore- 13114*; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Clitoria ternatea* var. *pilosula* Wall. ex Baker, 1876**

**Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Jalkot; verbatimLatitude: 17°49.521N; verbatimLongitude: 76°20.436E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: July-October; fieldNumber: *RDG- 355*; fieldNotes: Trailing/twining herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Clitoria ternatea* var. *ternatea* L. 1753**

**Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Apsinga; verbatimLatitude: 18°04.661N; verbatimLongitude: 76°01.855E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-December; fieldNumber: *R. D. Gore- 13126*; fieldNotes: Trailing/twining herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Crotalaria albida* Heyne ex Roth, 1821**

**Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Beed; locality: Bhayala; verbatimLatitude: 18°51.525N; verbatimLongitude: 75°37.058E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-January; fieldNumber: *RDG- 1289*; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Crotalaria berteroana* DC. 1825**

**Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; county: Marathwada; municipality: Osmanabad; month: November-February; fieldNumber: *Almeida- s.n.*; fieldNotes: Shrubs; institutionCode: Blatter Herbarium, St. Xavier's College, Mumbai (BLAT).



***Crotalaria decasperma* Naik, 1966****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Ramling sanctuary; verbatimLatitude: 18°17.584N; verbatimLongitude: 75°57.059E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-November; fieldNumber: RDG- 218; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Crotalaria ferruginea* Grah. ex Benth. 1843****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Nilanga; locality: Tambala; verbatimLatitude: 17°56.534N; verbatimLongitude: 76°53.307E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: November-February; fieldNumber: RDG- 1057; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Crotalaria filipes* Benth. 1843****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: AUSA; locality: Killari; verbatimLatitude: 18°03.570N; verbatimLongitude: 76°35.565E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-October; fieldNumber: RDG- 243; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Crotalaria hebecarpa* (DC.) Rudd, 1983****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Ambajogai; locality: Near Pus; verbatimLatitude: 18°44.471N; verbatimLongitude: 76°29.617E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: July-December; fieldNumber: RDG- 018; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Crotalaria hirta* Willd. 1803****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Ramling sanctuary; verbatimLatitude: 18°17.491N; verbatimLongitude: 75°57.145E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: July-December; fieldNumber: RDG- 949; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Crotalaria juncea* L. 1753****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Latur; locality: Nagzari; verbatimLatitude: 18°28.025N; verbatimLongitude: 76°30.667E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: July-December; fieldNumber: RDG- 482; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Crotalaria leptostachya* Benth. 1843****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Near Aini; verbatimLatitude: 18°16.863N; verbatimLongitude: 76°00.298E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: July-December; fieldNumber: RDG- 307; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Crotalaria linifolia* L. f. 1781****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Washi (Osmanabad); locality: Dindori; verbatimLatitude: 18°26.741N; verbatimLongitude: 75°46.191E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-November; fieldNumber: RDG- 1275; fieldNotes: Shrubs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Crotalaria medicaginea* Lam. 1786****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Dharur (Beed); locality: Jiwachiwadi; verbatimLatitude: 18°50.570N; verbatimLongitude: 76°00.963E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-October; fieldNumber: RDG- 1278; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Crotalaria montana* Heyne ex Roth, 1821****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Barshi; locality: Chumb; verbatimLatitude: 18°24.714N; verbatimLongitude: 75°45.386E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-December; fieldNumber: RDG- 1197; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).



***Crotalaria mysorensis* Roth, 1821****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Ambajogai; locality: Mukundraj; verbatimLatitude: 18°45.567N; verbatimLongitude: 76°22.043E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-January; fieldNumber: *RDG- 385*; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Crotalaria notonii* Wight & Arn. 1834****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Patoda; locality: Wadzari; verbatimLatitude: 18°54.413N; verbatimLongitude: 75°32.010E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-December; fieldNumber: *RDG- 720*; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Crotalaria orixensis* Willd. 1803****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Ramling sanctuary; verbatimLatitude: 18°17.799N; verbatimLongitude: 75°56.720E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-December; fieldNumber: *RDG- 007*; fieldNotes: Trailing/twining herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Crotalaria pallida* Ait. 1789****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Barshi (Solapur); locality: Barshi town; verbatimLatitude: 18°15.257N; verbatimLongitude: 75°42.443E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-January; fieldNumber: *RDG- 676*; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Crotalaria prostrata* Rottl. 1809****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Ambajogai; locality: Near Ghatnandur; verbatimLatitude: 18°43.878N; verbatimLongitude: 76°32.367E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-December; fieldNumber: *RDG- 015*; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Crotalaria pusilla* Heyne ex DC. 1825****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Beed; locality: Near Yelamb-ghat; verbatimLatitude: 18°47.282N; verbatimLongitude: 75°48.548E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-November; fieldNumber: RDG- 386; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Crotalaria ramosissima* Roxb. 1832****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Lohara; locality: Near Wadgaon; verbatimLatitude: 17°55.868N; verbatimLongitude: 76°20.933E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-February; fieldNumber: RDG- 483; fieldNotes: Shrubs; institutionCode: Walchand College of Arts & Science, Solapur (WCAS).

***Crotalaria retusa* L. 1753****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Ambajogai; locality: Murkatwadi; verbatimLatitude: 18°44.280N; verbatimLongitude: 76°35.551E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: October-January; fieldNumber: RDG- 027; fieldNotes: Shrubs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Crotalaria spectabilis* Roth, 1821****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Ambajogai; locality: Mukundraj; verbatimLatitude: 18°45.567N; verbatimLongitude: 76°22.043E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: October-January; fieldNumber: RDG- 735; fieldNotes: Shrubs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Crotalaria verrucosa* L. 1753****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Ambajogai; locality: Near Talni; verbatimLatitude: 18°44.244N; verbatimLongitude: 76°30.519E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-November; fieldNumber: RDG- 026; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).



***Crotalaria vestita* Baker, 1876****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Gad-devdari; verbatimLatitude: 18°15.772N; verbatimLongitude: 75°59.455E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-March; fieldNumber: *RDG- 1015*; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Cullen corylifolia* (L.) Medik. 1787****Materials**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Chakur; locality: Gharni-dam (Naleagon); verbatimLatitude: 18°22.545N; verbatimLongitude: 76°50.148E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-December; fieldNumber: *RDG- 531*; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).
- b. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Apsinga; verbatimLatitude: 18°03.327N; verbatimLongitude: 76°02.454E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-December; fieldNumber: *R.D. Gore- 13101*; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Cyamopsis tetragonoloba* (L.) Taub. 1894****Materials**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Ambajogai; locality: Near Pus; verbatimLatitude: 18°44.206N; verbatimLongitude: 76°29.988E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: January-December; fieldNumber: *RDG- 019*; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).
- b. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Apsinga; verbatimLatitude: 18°04.951N; verbatimLongitude: 76°01.676E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: January-December; fieldNumber: *R.D. Gore- 13030*; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Dalbergia lanceolaria* subsp. *lanceolaria* L. f. 1781****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Beed; locality: Dharur; verbatimLatitude: 18°49.845N; verbatimLongitude: 76°06.961E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: March-June; fieldNumber: *RDG- 1314*; fieldNotes: Trees; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Dalbergia lanceolaria* subsp. *paniculata* (Roxb.) Thoth. 1985****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Renapur; locality: Karepur; verbatimLatitude: 18°35.471N; verbatimLongitude: 76°41.795E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: March-July; fieldNumber: RDG- 615; fieldNotes: Trees; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Dalbergia latifolia* Roxb. 1799****Material**

- a. continent: Asia; country: India; countryCode: IND; stateProvince: Maharashtra; municipality: Kalamb; locality: Ranjani; verbatimLatitude: 18°32.116N; verbatimLongitude: 76°14.515E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: July-October; fieldNumber: RDG- 129; fieldNotes: Trees; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Dalbergia melanoxylon* Guill. & Perr. 1832****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Chakur; locality: Wagholi; verbatimLatitude: 18°33.873N; verbatimLongitude: 76°48.690E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: April-June; fieldNumber: RDG- 375; fieldNotes: Trees; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Dalbergia sissoo* Roxb. ex DC. 1825****Materials**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Papnas; verbatimLatitude: 18°00.164N; verbatimLongitude: 76°04.154E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: March-December; fieldNumber: RDG- 648; fieldNotes: Trees; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).
- b. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Apsinga road; verbatimLatitude: 18°04.142N; verbatimLongitude: 76°04.220E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: March-December; fieldNumber: R.D. Gore- 13141; fieldNotes: Trees; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Desmodium alysicarpoides* van Meeuwen, 1962****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Ramling sanctury; verbatimLatitude: 18°17.648N; verbatimLongitude: 75°56.928E; verbatimCoordinateSystem: degrees minutes;



geodeticDatum: WGS84; month: September-December; fieldNumber: RDG- 743;  
fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Desmodium dichotomum* (Willd.) DC. 1825**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Beed; locality: Pachangri; verbatimLatitude: 18°43.013N; verbatimLongitude: 75°35.435E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-January; fieldNumber: RDG- 1242; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Desmodium gangeticum* (L.) DC. 1825**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Bhanasgaon; verbatimLatitude: 18°17.094N; verbatimLongitude: 75°56.724E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-January; fieldNumber: RDG- 010; fieldNotes: Shrubs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Desmodium heterocarpon* (L.) DC. 1825**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Solapur; locality: Solapur district; month: August-September; fieldNumber: Kothari- s.n.; fieldNotes: Shrubs; institutionCode: Botanical Survey of India (BSI).

### ***Desmodium laxiflorum* DC. 1825**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Beed; locality: Bhayala; verbatimLatitude: 18°51.753N; verbatimLongitude: 75°36.987E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-December; fieldNumber: RDG- 1290; fieldNotes: Shrubs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Desmodium oojeinense* (Roxb.) Ohashi, 1973**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Patoda; locality: Gangewadi; verbatimLatitude: 18°54.025N; verbatimLongitude: 75°14.831E; verbatimCoordinateSystem: degrees minutes;

geodeticDatum: WGS84; month: March-May; fieldNumber: *RDG- 682*; fieldNotes: Trees;  
institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Desmodium triflorum* (L.) DC. 1825**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra;  
municipality: Barshi; locality: Wakadi; verbatimLatitude: 18°16.004N; verbatimLongitude:  
75°34.095E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84;  
month: September-March; fieldNumber: *RDG- 045*; fieldNotes: Trailing/twining herbs;  
institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Desmodium velutinum* (Willd.) DC. 1825**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra;  
municipality: Osmanabad; locality: Ghatangri; verbatimLatitude: 18°13.292N;  
verbatimLongitude: 76°01.252E; verbatimCoordinateSystem: degrees minutes;  
geodeticDatum: WGS84; month: September-January; fieldNumber: *RDG- 799*;  
fieldNotes: Shrubs; institutionCode: Wachland College of Arts & Science, Solapur  
(WCAS).

### ***Dunbaria glandulosa* (Dalz.) Prain, 1897**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra;  
municipality: Chakur; locality: Wagholi; verbatimLatitude: 18°34.163N; verbatimLongitude:  
76°49.546E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84;  
month: August-October; fieldNumber: *RDG- 1268*; fieldNotes: Woody climbers;  
institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Erythrina suberosa* Roxb. 1832**

#### **Material**

- a. continent: Asia; country: India; countryCode: IND; stateProvince: Maharashtra;  
municipality: Tuljapur; locality: Apsinga; verbatimLatitude: 18°04.845N;  
verbatimLongitude: 76°02.001E; verbatimCoordinateSystem: degrees minutes;  
geodeticDatum: WGS84; month: February-May; fieldNumber: *RDG- 043*; fieldNotes:  
Trees; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Erythrina variegata* L. 1754**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra;  
municipality: Beed; locality: Yelamb-ghat; verbatimLatitude: 18°47.469N;  
verbatimLongitude: 75°49.470E; verbatimCoordinateSystem: degrees minutes;



geodeticDatum: WGS84; month: February-June; fieldNumber: RDG- 923; fieldNotes: Trees; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Flemingia strobilifera* (L.) R. Br. 1812**

#### **Material**

- a. continent: Asia; country: India; countryCode: IND; stateProvince: Maharashtra; municipality: Pathardi; locality: Manewadi; verbatimLatitude: 19°02.440N; verbatimLongitude: 75°16.957E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-September; fieldNumber: RDG- 617; fieldNotes: Shrubs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Gliricidia sepium* (Jacq.) Kunth ex Walp. 1842**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Udgir; locality: Dongraj; verbatimLatitude: 18°29.675N; verbatimLongitude: 77°01.694E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: February-June; fieldNumber: RDG- 550; fieldNotes: Trees; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Glycine max* (L.) Merr. 1917**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Ambajogai; locality: Mukundraj; verbatimLatitude: 18°45.134N; verbatimLongitude: 76°21.867E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-December; fieldNumber: RDG- 736; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Glycyrrhiza glabra* L. 1753**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Government Agriculture College, Kini; month: June-October; fieldNumber: RDG- 785; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Indigofera astragalina* DC. 1825**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Ramling; verbatimLatitude: 18°17.447N; verbatimLongitude: 75°57.178E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-November; fieldNumber: RDG- 763; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Indigofera cassioides* Rottl. ex DC. 1825****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Beed; locality: Naigaon (PT); verbatimLatitude: 18°53.501N; verbatimLongitude: 75°35.364E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: July-December; fieldNumber: RDG- 967; fieldNotes: Shrubs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Indigofera coerulea* Roxb. 1832****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Ambajogai; locality: Ghatnandur; verbatimLatitude: 18°43.875N; verbatimLongitude: 76°33.351E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September- December; fieldNumber: RDG- 013; fieldNotes: Shrubs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Indigofera cordifolia* Heyne ex Roth. 1821****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Naldurg; locality: Jalkot; verbatimLatitude: 17°49.054N; verbatimLongitude: 76°20.298E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: July-November; fieldNumber: RDG- 362; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Indigofera deccanensis* Sanjappa, 1983****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Patoda (Beed); locality: Sautada; verbatimLatitude: 18°47.927N; verbatimLongitude: 75°21.069E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-December; fieldNumber: RDG- 999; fieldNotes: Shrubs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Indigofera glandulosa* var. *glandulosa* Wendl. 1748****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Ambajogai; locality: Near Talni; verbatimLatitude: 18°44.377N; verbatimLongitude: 76°30.592E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-January; fieldNumber: RDG- 020; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).



***Indigofera glandulosa* var. *sykesii* Griff. ex Baker, 1876****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Ramling; verbatimLatitude: 18°17.464N; verbatimLongitude: 75°57.168E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-November; fieldNumber: *RDG- 298*; fieldNotes: Erect herb; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Indigofera linifolia* (L. f) Retz. 1786****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Ramling; verbatimLatitude: 18°17.918N; verbatimLongitude: 75°57.126E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-January; fieldNumber: *RDG- 002*; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Indigofera linnaei* Ali, 1958****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Ambajogai; locality: Talni; verbatimLatitude: 18°44.131N; verbatimLongitude: 76°30.630E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: June-December; fieldNumber: *RDG- 011*; fieldNotes: Trailing/twining herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Indigofera parviflora* Heyne ex Hook. & Arn. 1834****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Chakur; locality: Wagholi; verbatimLatitude: 18°34.266N; verbatimLongitude: 76°48.271E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-January; fieldNumber: *RDG- 1218*; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Indigofera prostrata* Willd. 1802****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Solapur; locality: Solapur district; month: August-October; fieldNumber: *Acland- 389*; fieldNotes: Erect herbs; institutionCode: Blatter Herbarium, St. Xavier's College, Mumbai (BLAT).

***Indigofera spicata* Forssk. 1775****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: AUSA; locality: Ashiv; verbatimLatitude: 18°06.077N; verbatimLongitude: 76°20.904E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-December; fieldNumber: RDG- 1155; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Indigofera tinctoria* L. 1753****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Patoda (Beed); locality: Sautada; verbatimLatitude: 18°48.564N; verbatimLongitude: 75°21.415E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-January; fieldNumber: RDG- 226; fieldNotes: Shrubs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Indigofera trifoliata* var. *duthiei* (Drumm. ex Naik) Sanjappa, 1991****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Latur; locality: AUSA; verbatimLatitude: 18°15.560N; verbatimLongitude: 76°30.998E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-November; fieldNumber: RDG- 340; fieldNotes: Shrubs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Indigofera trifoliata* var. *trifoliata* L. 1756****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Dharur; locality: Choramba; verbatimLatitude: 18°51.684N; verbatimLongitude: 76°05.462E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-December; fieldNumber: RDG- 1226; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Indigofera trita* L. f. 1781****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Ambajogai; locality: Murkatwadi; verbatimLatitude: 18°44.180N; verbatimLongitude: 76°35.262E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-January; fieldNumber: RDG- 028; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).



***Lablab purpureus* var. *lignosus* (L.) King, 1898****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Latur; locality: Nagzari; verbatimLatitude: 18°28.073N; verbatimLongitude: 76°30.744E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: October-January; fieldNumber: *RDG- 479*; fieldNotes: Woody climbers; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Lablab purpureus* var. *purpureus* (L.) Sweet, 1970****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Ambajogai; locality: Talni; verbatimLatitude: 18°44.197N; verbatimLongitude: 76°30.808E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-February; fieldNumber: *RDG- 023*; fieldNotes: Woody climbers; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Lathyrus sativus* L. 1753****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Akkalkot (Solapur); locality: Hunoor; month: December-February; fieldNumber: *RDG- 1120*; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Lens culinaris* Medik. 1788****Materials**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Panchmahal (near Bembli); verbatimLatitude: 18° 09.192N; verbatimLongitude: 76°11.897E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: December-February; fieldNumber: *RDG- 461*; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).
- b. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Bembli; month: December-February; fieldNumber: *R.D. Gore- 13184*; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Macroptilium lathyroides* var. *semierectum* (L.) Urb. 1928****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Solapur; locality: Barshi town; verbatimLatitude: 18°14.544N; verbatimLongitude: 75°41.718E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-December; fieldNumber: *RDG- 664*;

fieldNotes: Woody climbers; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Macrotyloma uniflorum* (Lam.) Verdc. 1970**

#### **Materials**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Patoda; locality: Chincholi; verbatimLatitude: 18°55.864N; verbatimLongitude: 75°15.331E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-November; fieldNumber: RDG- 282; fieldNotes: Woody climbers; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).
- b. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Lohara; locality: Near Wadgaon fata; verbatimLatitude: 17°55.876N; verbatimLongitude: 76°20.938E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-November; fieldNumber: R.D. Gore- 13151; fieldNotes: Woody climbers; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Medicago sativa* L. 1753**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: AUSA; locality: Kharosa; verbatimLatitude: 18°09.199N; verbatimLongitude: 76°40.085E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: December-January; fieldNumber: RDG- 606; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Melilotus albus* Medik. 1787**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Paranda; locality: Domgaon; verbatimLatitude: 18°18.939N; verbatimLongitude: 75°24.401E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: January-August; fieldNumber: RDG- 636; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Melilotus indicus* (L.) All. 1785**

#### **Materials**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Wanegaon; verbatimLatitude: 17°57.009N; verbatimLongitude: 76°12.329E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: January-March; fieldNumber: RDG- 559; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).
- b. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Naldurg; verbatimLatitude: 17°49.405N;



verbatimLongitude: 76°17.531E; verbatimCoordinateSystem: degrees minutes;  
geodeticDatum: WGS84; month: January-March; fieldNumber: *R.D. Gore- 13186*;  
fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Mucuna minima* Haines, 1919**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Gad-devdari; verbatimLatitude: 18°15.828N; verbatimLongitude: 75°59.417E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: October-January; fieldNumber: *RDG- 1013*; fieldNotes: Trailing/twining herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Mucuna pruriens* (L.) DC. 1825**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Wadgaon-Siddheshwar; verbatimLatitude: 18°07.566N; verbatimLongitude: 76°04.029E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: October-December; fieldNumber: *RDG- 872*; fieldNotes: Woody climbers; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Neonotonia wightii* (Grah. ex Wight & Arn.) Lackey, 1977**

#### **Materials**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; county: Marathwada; locality: Beed district; month: September-December; fieldNumber: *Naik- 397*; fieldNotes: Woody climbers; institutionCode: Herbarium of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (BAMU).
- b. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; county: Marathwada; locality: Osmanabad; month: November; fieldNumber: *Almeida- s.n.*; fieldNotes: Woody climbers; institutionCode: Blatter Herbarium, St. Xeviers College Mumbai (BLAT).

### ***Paracalyx scariousus* (Roxb.) Ali, 1968**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Ramling sanctuary; verbatimLatitude: 18°17.946N; verbatimLongitude: 75°56.773E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: December-March; fieldNumber: *RDG- 542*; fieldNotes: Woody climbers; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Phaseolus lunatus* L. 1753****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Lohara; locality: Lohara town; month: November-February; fieldNumber: RDG- 1105; fieldNotes: Trailing/twining herb; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Phaseolus vulgaris* L. 1753****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Apsinga; verbatimLatitude: 18°04.951N; verbatimLongitude: 76°01.676E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-February; fieldNumber: RSD- 1210; fieldNotes: Trailing/twining herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Pisum arvense* L. 1753****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Omerga; locality: Madaj; verbatimLatitude: 17°55.902N; verbatimLongitude: 76°37.176E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-February; fieldNumber: RSD- 019; fieldNotes: Trailing/twining herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Pisum sativum* L. 1753****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Sindphal; month: August-February; fieldNumber: RSD- 120; fieldNotes: Trailing/twining herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Pongamia pinnata* (L.) Pierre, 1899****Materials**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Omerga; locality: Wagdari; verbatimLatitude: 17°55.167N; verbatimLongitude: 76°39.447E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: March-August; fieldNumber: RDG- 576; fieldNotes: Trees; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).
- b. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Naldurg; verbatimLatitude: 17°49.366N; verbatimLongitude: 76°17.645E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: March-August; fieldNumber: R.D. Gore- 13185;



fieldNotes: Trees; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Pseudarthria viscida* (L.) Wight & Arn. 1834**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Papnas; verbatimLatitude: 18°09.370N; verbatimLongitude: 76°03.071E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-December; fieldNumber: RDG- 186; fieldNotes: Shrubs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Psophocarpus tetragonolobus* (L.) DC. 1825**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Pathardi (Ahmednagar); locality: Dhakanwadi; verbatimLatitude: 18°59.782N; verbatimLongitude: 75°18.645E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: October-March; fieldNumber: RDG- s.n.; fieldNotes: Trailing/twining herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Pterocarpus marsupium* Roxb. 1799**

#### **Materials**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Ambajogai; locality: Talni; verbatimLatitude: 18°45.211N; verbatimLongitude: 76°30.800E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: December-March; fieldNumber: RDG- 016; fieldNotes: Trees; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).
- b. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Apsinga; verbatimLatitude: 18°04.047N; verbatimLongitude: 76°04.035E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: December-March; fieldNumber: R.D. Gore- 13102; fieldNotes: Trees; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Pueraria montana* var. *lobata* (Willd.) Sanjappa, 1991**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Pandhar (Apsinga); verbatimLatitude: 18°04.140N; verbatimLongitude: 76°02.000E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: January-June; fieldNumber: RDG- 725; fieldNotes: Woody climbers; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Rhynchosia capitata* (Heyne ex Roth) DC. 1825****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Jalkot (Naldurg); verbatimLatitude: 17°49.654N; verbatimLongitude: 76°19.680E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-October; fieldNumber: *RDG- 364*; fieldNotes: Trailing/twining herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Rhynchosia minima* var. *laxiflora* (Camb.) Baker, 1876****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Dharur (Beed); locality: Dharur fort; verbatimLatitude: 18°49.142N; verbatimLongitude: 76°06.278E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: June-November; fieldNumber: *RDG- 177*; fieldNotes: Woody climbers; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Rhynchosia minima* var. *minima* (L.) DC. 1825****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Kalamb; locality: Awad-Shirpura; verbatimLatitude: 18°34.159N; verbatimLongitude: 76°11.167E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: July-December; fieldNumber: *RDG- 124*; fieldNotes: Woody climbers; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Rhynchosia rothii* Benth. ex Ait. 1869****Material**

- a. continent: Asia; country: India; countryCode: IND; stateProvince: Maharashtra; municipality: Patoda; locality: Sautada; verbatimLatitude: 18°47.804N; verbatimLongitude: 75°21.043E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-November; fieldNumber: *RDG- 1000*; fieldNotes: Woody climbers; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Sesbania bispinosa* (Jacq.) Steud. ex Wight, 1909****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Beed; locality: Dharur; verbatimLatitude: 18°48.359N; verbatimLongitude: 76°06.298E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-November; fieldNumber: *RDG- 400*; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).



***Sesbania cannabina* (Retz.) Poir. 1806****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Ashti (Beed); locality: Karanji; month: August-January; fieldNumber: RDG-1191; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Sesbania grandiflora* (L.) Poir. 1806****Materials**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Bembli; month: September-April; fieldNumber: RDG-805; fieldNotes: Trees; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).
- b. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Near Tamalwadi; verbatimLatitude: 17°50.842N; verbatimLongitude: 75°57.829E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-April; fieldNumber: R.D. Gore- 13173; fieldNotes: Trees; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Sesbania sesban* (L.) Merr. 1912****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Patoda; locality: Matwali; verbatimLatitude: 18°48.496N; verbatimLongitude: 75°18.005E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: December-March; fieldNumber: RDG- 911; fieldNotes: Shrubs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Stylosanthes fruticosa* (Retz.) Alst. 1931****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Chakur; locality: Mandurki; verbatimLatitude: 18°28.950N; verbatimLongitude: 76°54.276E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-March; fieldNumber: RDG- 039; fieldNotes: Shrubs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Stylosanthes hamata* (L.) Taub. 1890****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Patoda; locality: Matwali; verbatimLatitude: 18°48.729N; verbatimLongitude: 75°17.970E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-February; fieldNumber: RDG- 919; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Taverniera cuneifolia* (Roth.) Arn. 1836****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Apsinga; verbatimLatitude: 18°04.849N; verbatimLongitude: 76°01.712E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: December-February; fieldNumber: RDG- 042; fieldNotes: Shrubs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Tephrosia hamiltonii* Drum. 1918****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Jamkhed; locality: Shirur; verbatimLatitude: 18°43.591N; verbatimLongitude: 75°22.370E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: July-January; fieldNumber: RDG- 1099; fieldNotes: Shrubs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Tephrosia leptostachya* DC. 1825****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Kawaldara; verbatimLatitude: 18°03.865N; verbatimLongitude: 76°05.590E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: July-January; fieldNumber: RDG- 663; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Tephrosia pumila* (Lam.) Pers. 1807****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Ambajogai; locality: Talni; verbatimLatitude: 18°45.287N; verbatimLongitude: 76°30.729E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-February; fieldNumber: RDG- 017; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Tephrosia purpurea* (L.) Pers. 1807****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Apsinga; verbatimLatitude: 18°035.17N; verbatimLongitude: 76°30.14E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-December; fieldNumber: R.D. Gore- 13074; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).



***Tephrosia senticosa* (L.) Pers. 1807****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Pathardi; locality: Chinchpur; verbatimLatitude: 19°00.506N; verbatimLongitude: 75°18.188E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-November; fieldNumber: RDG- 367; fieldNotes: Shrubs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Tephrosia strigosa* (Dalz.) Santapau & Mahesh, 1957****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Ambajogai; locality: Ghatnandur; verbatimLatitude: 18°44.095N; verbatimLongitude: 76°33.291E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-September; fieldNumber: RDG- 012; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Tephrosia villosa* (L.) Pers. 1807****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Kalamb; locality: Yermala; verbatimLatitude: 18°22.308N; verbatimLongitude: 75°51.904E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-December; fieldNumber: RDG- 502; fieldNotes: Shrubs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Teramnus labialis* (L. f.) Spreng. 1826****Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Apsinga; verbatimLatitude: 18°03.719N; verbatimLongitude: 76°02.903E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: October-February; fieldNumber: RDG- 040; fieldNotes: Woody climbers; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

***Trigonella foenum-graecum* L. 1753****Materials**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Ambajogai; locality: Talni; verbatimLatitude: 18°44.120N; verbatimLongitude: 76°30.854E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: January-December; fieldNumber: RDG- 024; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).
- b. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Apsinga; verbatimLatitude: 18°04.951N;

verbatimLongitude: 76°01.676E; verbatimCoordinateSystem: degrees minutes;  
geodeticDatum: WGS84; month: January-December; fieldNumber: *R.D. Gore- 13027*;  
fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Trigonella occulta* Del. 1812**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra;  
municipality: Tuljapur; locality: Near Sindphal (Ghatshil); verbatimLatitude: 18°00.332N;  
verbatimLongitude: 76°03.837E; verbatimCoordinateSystem: degrees minutes;  
geodeticDatum: WGS84; month: October-March; fieldNumber: *RDG- 529*; fieldNotes:  
Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Vigna aconitifolia* (Jacq.) Marechal, 1969**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra;  
municipality: Nilanga; locality: Madansuri; verbatimLatitude: 18°01.649N;  
verbatimLongitude: 76°42.618E; verbatimCoordinateSystem: degrees minutes;  
geodeticDatum: WGS84; month: August-November; fieldNumber: *RDG- 232*; fieldNotes:  
Trailing/twining herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Vigna angularis* (Willd.) Ohwi. & Oha Shrubi, 1969**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra;  
municipality: Nilanga; locality: Kasar-Sirshi; month: August-November; fieldNumber: *RDG - 1081*; fieldNotes: Trailing/twining herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Vigna indica* Dixit, Bhat & Yadav, 2011**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra;  
municipality: Washi; locality: Kunthalgiri; verbatimLatitude: 18°32.666N;  
verbatimLongitude: 75°42.109E; verbatimCoordinateSystem: degrees minutes;  
geodeticDatum: WGS84; month: August-January; fieldNumber: *RDG- 233*; fieldNotes:  
Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Vigna mungo* (L.) Hepper, 1956**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra;  
municipality: Akkalkot; locality: Kajikanbas; month: August-October; fieldNumber: *RDG-*



1077; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Vigna radiata* (L.) R. Wilczek, 1954**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Nilanga; locality: Tambala; verbatimLatitude: 17°55.829N; verbatimLongitude: 76°54.044E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-October; fieldNumber: RSD- 180; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Vigna stipulacea* Kuntze, 1891**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Osmanabad; locality: Papnas; verbatimLatitude: 18°09.611N; verbatimLongitude: 76°03.049E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-December; fieldNumber: R.D. Gore- 13161; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Vigna sublobata* (Roxb.) Babu & Shrubarma, 1987**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Washi; locality: Kunthalgiri; verbatimLatitude: 18°32.097N; verbatimLongitude: 75°41.563E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-November; fieldNumber: RDG- 700; fieldNotes: Trailing/twining herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Vigna trilobata* (L.) Verdc. 1968**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Patoda (Beed); locality: Chincholi; verbatimLatitude: 18°55.914N; verbatimLongitude: 75°14.981E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: August-December; fieldNumber: RDG- 284; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Vigna umbellata* (Thunb.) Ohwi & OhaShrubi, 1969**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Washi; locality: Dindori; verbatimLatitude: 18°27.077N; verbatimLongitude:

75°46.480E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: September-October; fieldNumber: RDG- 731; fieldNotes: Trailing/twining herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Vigna unguiculata* subsp. *cylindrica* (L.) Eseltine, 1931**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Pathardi (Ahmednagar); locality: Dhakanwadi; verbatimLatitude: 18° 59.782N; verbatimLongitude: 75°18.645E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: July-October; fieldNumber: RDG- 380; fieldNotes: Trailing/twining herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

### ***Vigna unguiculata* subsp. *unguiculata* (L.) Walp. 1842**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Tuljapur; locality: Near Devsinga; verbatimLatitude: 17°56.436N; verbatimLongitude: 76°10.496E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: June-October; fieldNumber: RSD- 012; fieldNotes: Trailing/twining herbs; institutionCode: Botanical Survey of India, Pune (BSI).

### ***Zornia diphylla* (L.) Pers. 1807**

#### **Material**

- a. continent: Asia; country: India; countryCode: IN; stateProvince: Maharashtra; municipality: Bhoom; locality: Shekapur (Ashta); verbatimLatitude: 18°23.935N; verbatimLongitude: 75°37.858E; verbatimCoordinateSystem: degrees minutes; geodeticDatum: WGS84; month: July-October; fieldNumber: RDG- 149; fieldNotes: Erect herbs; institutionCode: Wachland College of Arts & Science, Solapur (WCAS).

## **Analysis**

In the present work, authors have provided the first comprehensive inventory of legumes of Balaghat Ranges of Maharashtra. About 123 species, four subspecies and 17 varieties belonging to 83 genera of Fabaceae have been recorded from Balaghat Ranges of Maharashtra. The members of Fabaceae are dominant in herbaceous vegetation of the region. They are more diverse in genera like *Crotalaria* (23 taxa), *Indigofera* (16 taxa), *Alysicarpus* (14 taxa), *Vigna* (11 taxa) and *Desmodium* (8 taxa). Out of 144 leguminous taxa, 91 are herbs, 16 woody climbers or lianas, 24 shrubs and 13 trees (Table 1). Twelve taxa are endemic to India of which *Indigofera deccanensis* falls into Critically Endangered IUCN Red list category (Mishra and Singh 2001).



Table 1.

Leguminous Crop Wild Relatives (CWR) of Balaghat Ranges of Maharashtra.

[Note:- **HR**- herbs; **SH**- shrubs; **THR**- trailing/twining herbs; **WCL**- woody climbers].

Sr. No.	Name of the species	Habit	Type of crops
1.	<i>Cajanus platycarpus</i> (Benth.) van der Maesen	THR	Pulses
2.	<i>Cajanus scarabaeoides</i> (L.) Du-Petit-Thours	THR	Pulses
3.	<i>Canavalia cathartica</i> Thours	WCL	Vegetable
4.	<i>Crotalaria juncea</i> L.	HR	Oil & fiber
5.	<i>Crotalaria leptostachya</i> Benth.	HR	Oil & Fiber
6.	<i>Crotalaria retusa</i> L.	SH	Oil & Fiber
7.	<i>Crotalaria verrucosa</i> L.	HR	Oil & fiber
8.	<i>Lablab purpureus</i> (L.) Sweet var. <i>lignosus</i> (L.) King	WCL	Vegetable
9.	<i>Lablab purpureus</i> (L.) Sweet var. <i>purpureus</i> Verdc.	WCL	Vegetable
10.	<i>Lens culinaris</i> Medik.	HR	Pulses
11.	<i>Stylosanthes fruticosa</i> (Retz.) Alston.	SH	Food & Fodder
12.	<i>Trigonella occulta</i> Del.	HR	Vegetable
13.	<i>Vigna aconitifolia</i> (Jacq.) Morchal.	THR	Pulses
14.	<i>Vigna indica</i> Dixit et al.	HR	Pulses
15.	<i>Vigna mungo</i> (L.) Hepper.	HR	Pulses
16.	<i>Vigna sublobata</i> (Roxb.) Babu & Sharma	THR	Pulses
17.	<i>Vigna trilobata</i> (L.) Verdc.	HR	Pulses
18.	<i>Vigna umbellata</i> (Thunb.) Ohwi & Ohashi	THR	Pulses
19.	<i>Vigna unguiculata</i> (L.) Walp. subsp. <i>cylendrica</i> (L.) Eselt.	THR	Pulses

## Discussion

The present study is an outcome of intensive and extensive field explorations and herbarium studies carried out between the years 2009-2013. The legumes of Balaghat Ranges show wide range of species diversity and growth forms. The total number of leguminous taxa reported for the Maharashtra State as on today is 344 (Almeida 1998; Kothari 2000; Lakshminarasimhan 2001). For Balaghat Ranges, the number of leguminous taxa works out to be 144. Therefore, percentage of leguminous taxa of Balaghat Ranges out of whole legumes of Maharashtra will be 41.86%. The members of Fabaceae are dominant in herbaceous vegetation and more speciose in genera like *Crotalaria* (23 taxa), *Indigofera* (16 taxa), *Alysicarpus* (14 taxa), *Vigna* (11 taxa) and *Desmodium* (8 taxa). The area under investigation is relatively small for the assessment of endemism of leguminous elements. It is continuous with the surrounding areas on the Deccan plateau and there is no obvious natural boundary between this and neighboring region, which can hold any



endemic taxa. On the other hand, comparative statistical analysis of the leguminous species recorded so far from Balaghat Ranges with those of the neighboring regions reveals highest proportion of similarities. However, *Alysicarpus luteo-vexillatus*, *A. pubescens* var. *vasavadae*, *Crotalaria decasperma*, *C. filipes*, *C. hirta*, *C. leptostachya*, *C. linifolia*, *C. notonii*, *Indigofera deccanensis*, *I. glandulosa* var. *sykesii*, *I. trifoliata* var. *duthiei* and *Vigna indica* occur in Balaghat Ranges that are endemic to India. Among 12 endemic species, *Indigofera deccanensis* is known only from two localities with 907 Km<sup>2</sup> extent of occurrence, 10 Km<sup>2</sup> area of occupancy and severely fragmented small subpopulations. Hence, it falls into Critically Endangered IUCN Red List category (Mishra and Singh 2001; Gaikwad et al. 2014b).

The legumes of Balaghat Ranges have many actual and potential uses such as food, fodder, industrial lubricants, natural dyes, medicine and sources of edible oil and timber; and indirectly affect socio-economic development of the region. Some nine legumes are used as vegetables in Balaghat Ranges that include *Canavalia gladiata*, *Cyamopsis tetragonolobus*, *Lablab purpureus*, *Phaseolus vulgaris*, *Pisum sativum*, *Pisum arvense*, *Sesbania grandiflora*, *Trigonella foenum-graecum*, *Vigna unguiculata* var. *cylindrica* and eight legumes namely *Cajanus cajan*, *Cicer arietinum*, *Lathyrus sativus*, *Lens culinaris*, *Macrotyloma uniflorum*, *Vigna aconitifolia*, *V. mungo* and *Vigna radiata* are cultivated as pulses. *Arachis hypogea* and *Glycine max* are popular sources of edible oil. *Medicago sativa* and *Stylosanthes hamata* are cultivated as forage crops. *Dalbergia sissoo*, *D. melanoxylon*, *D. latifolium* and *Pterocarpus marsupium* are known for their quality timber whereas *Butea monosperma*, *Gliricidia sepium* and *Erythrina suberosa* are used as fuel wood. Flowers of *Butea monosperma* and *Indigofera tinctoria* are famous sources of natural dyes; later species is cultivated on commercial scale for yielding Indigo-dye. *Crotalaria juncea*, *Melilotus albus* and *M. indicus* are best green manures used by farmers. Seeds of *Pongamia pinnata* are a challenging source of non-edible oil, which has commercial importance as industrial lubricant. A reputed biofertilizer is prepared from seed of *Pongamia pinnata*. About 14 legumes of Balaghat Ranges have medicinal potential that include *Abrus precatorius*, *Butea monosperma*, *Clitoria ternatea* var. *pilosula*, *C. ternatea* var. *ternatea*, *Crotalaria verrucosa*, *Cullen corylifolia*, *Desmodium oojeinense*, *Mucuna pruriens*, *Pongamia pinnata*, *Pterocarpus marsupium*, *Tephrosia purpurea*, *Taverniera cuneifolia* and *Trigonella foenum-graecum*. About 19 leguminous taxa are wild relatives of our food and fodder crops have resistance to pests and diseases, and abiotic stresses such as drought and salinity can be used in improvement of the quality and yield of crops (Table 1).

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